

WHAT IS CLAIMED IS:

1. A mechanism for supporting a substrate to be coated with a film, which mechanism is used in a film forming apparatus, comprising:

a stage for receiving a substrate which has been transported into the film forming apparatus to form a film on the substrate;

a shaft member for angularly displacing the stage bearing the substrate from a substrate receiving position at which the stage received the substrate, to a film forming position at which a substrate bearing surface of the stage is vertical or substantially vertical;

a plurality of support members which are provided so as to protrude from the substrate bearing surface of the stage, for supporting an end surface of the substrate, which faces downwards, when the stage is angularly displaced to the film forming position; and

moving means for moving the support members.

2. The mechanism for supporting a substrate to be coated with a film of claim 1, wherein the moving means causes the support members to move in parallel in one direction of three dimensional directions on the stage or causes the support members to rotationally move on the stage.

3. The mechanism for supporting a substrate to be coated with a film of claim 1, wherein the moving means moves the support members towards or away from the shaft member.

4. The mechanism for supporting a substrate to be coated with a

film of claim 1, wherein the moving means is connected together with a plurality of the support members and moves the plurality of support members in one operation.

5. The mechanism for supporting a substrate to be coated with a film of claim 1, wherein a plurality of the moving means are provided to respectively connect with the plurality of support members to move the plurality of support members independently.

6. The mechanism for supporting a substrate to be coated with a film of claim 1, wherein the moving means is an actuator.

7. The mechanism for supporting a substrate to be coated with a film of claim 1, wherein each of the plurality of support members is formed in a columnar shape.

8. The mechanism for supporting a substrate to be coated with a film of claim 1, wherein the substrate is a glass substrate or a semiconductor wafer.

9. A method for supporting a substrate to be coated with a film, which method is used in a film forming apparatus, comprising the steps of:

placing a substrate to be coated with a film, which substrate has been transported into the film forming apparatus, on a stage movably

provided with a plurality of support members;

angularly displacing the stage on which the substrate is placed, from a substrate receiving position at which the substrate has been received by the stage, to a film forming position at which a substrate bearing surface of the stage is vertical or substantially vertical and at which an end surface of the substrate is supported from thereunder by the support members;

angularly displacing the stage from the film forming position back to the substrate receiving position, after film formation;

moving the support members after the stage has returned to the film placing position; and

transporting the substrate to be coated with a film, out of the stage of the film forming apparatus, after the movement of the support members.

10. The method for supporting a substrate to be coated with a film of claim 9, wherein in the step of moving the support members, the support members are moved in parallel to one direction of three dimensional directions on the stage or are rotationally moved on the stage.

11. The method for supporting a substrate to be coated with a film of claim 9, wherein in the step of moving the support members, the support members are moved in a direction towards or away from the shaft member for angularly displacing the stage.

12. The method for supporting a substrate to be coated with a film of claim 9, wherein the substrate is a glass substrate or a semiconductor wafer.

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